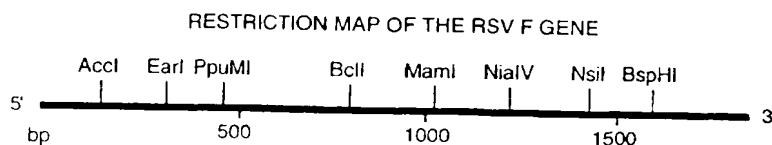




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C12N 15/45, A61K 39/155, 48/00	A2	(11) International Publication Number: WO 00/53767 (43) International Publication Date: 14 September 2000 (14.09.00)
(21) International Application Number: PCT/CA00 00227 (22) International Filing Date: 3 March 2000 (03.03.00) (30) Priority Data: 09/262,927 5 March 1999 (05.03.99) US (71) Applicant (for all designated States except US): CONNAUGHT LABORATORIES LIMITED [CA/CA]; 1755 Steeles Avenue West, Toronto, Ontario M2R 3T4 (CA). (72) Inventors; and (75) Inventors/Applicants (for US only): LI, Xiaomao [CA/CA]; 77 Harbour Square, Apartment 3701, Toronto, Ontario M5J 2S2 (CA). EWASYSHYN, Mary, E. [CA/CA]; Apartment 1506, 120 Torresdale Avenue, Toronto, Ontario M2R 3N7 (CA). SAMBHARA, Suryaprakash [CA/CA]; 50 Harness Circle, Markham, Ontario L3S 1Y1 (CA). KLEIN, Michel, H. [CA/CA]; 16 Munro Boulevard, Willowdale, Ontario M2P 1B9 (CA). (74) Agent: STEWART, Michael, I.; Sim & McBurney, 6th floor, 330 University Avenue, Toronto, Ontario M5G 1R7 (CA).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>

(54) Title: NUCLEIC ACID RESPIRATORY SYNCYTIAL VIRUS VACCINES



(57) Abstract

Non-replicating vectors containing a nucleotide sequence coding for an F protein of respiratory syncytial virus (RSV) and a promoter for such sequence, preferably a cytomegalovirus promoter, are described for *in vivo* immunization. The nucleotide sequence encoding the RSV F protein lacks a sequence encoding the homologous signal peptide but possesses a heterologous signal peptide enhancing RSV F protein expression. Such non-replicating vectors, including plasmids, also may contain a further nucleotide sequence located adjacent to the RSV F protein encoding sequence to enhance the immunoprotective ability of the RSV F protein when expressed *in vivo*. Such non-replicating vectors may be used to immunize a host against disease caused by infection with RSV, including a human host, by administration thereto, and may be formulated as immunogenic compositions with pharmaceutically-acceptable carriers for such purpose. Such vectors also may be used to produce antibodies for detection of RSV infection in a sample.

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